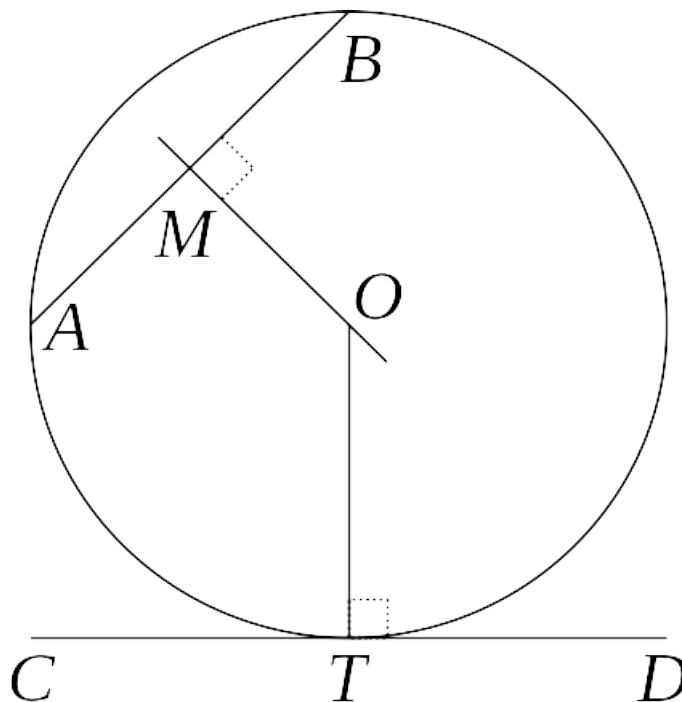


Mathematics 2260H – Geometry I: Euclidean Geometry

TRENT UNIVERSITY, Winter 2021

Assignment #5 – Circles and Right Angles

Due on Friday, 26 February.



Using nothing but what you have in Book I of the *Elements*, do each of the following questions. In both cases, we will call the centre of the given circle O .

1. Suppose A and B are different points on a circle. Show that the perpendicular bisector of the chord AB passes through the centre O of the circle. [5]
2. Suppose the line segment CD is tangent to the circle at T . Show that CD is perpendicular to the radius OT of the circle. [6]